

## Nuclear magnetic resonance in dilute magnetic alloys and superconductors

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### Abstract

The longitudinal and transverse spin-lattice relaxation rates for paramagnetic ion-nuclei in dilute Kondo systems are calculated. It is shown that observation of the Kondo anomalies in the NMR parameters is facilitated by either high temperatures ( $kT \gg \omega_s$ , the resonance frequency for localized moments) or low temperatures ( $kT \ll \omega_s$ ). The longitudinal spin-lattice relaxation of paramagnetic ion-nuclei in 'dirty' type II superconductors is investigated. The influence of the order parameter fluctuations on relaxation of paramagnetic ion-nuclei in type II superconductors is studied at temperatures slightly above the transition temperature  $T_c$ .

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